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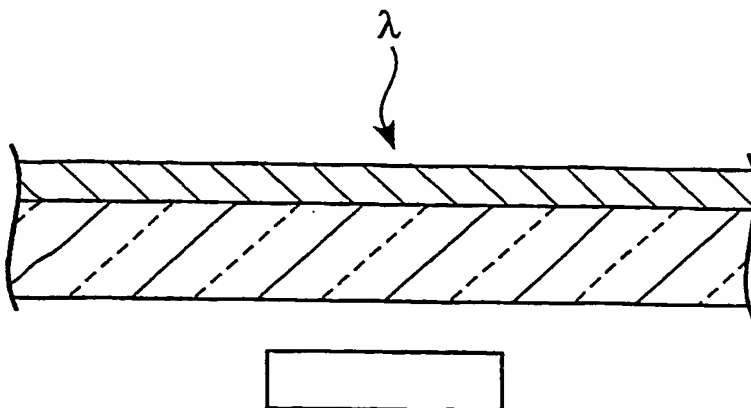
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(54) Title: OPTICAL LIMITER HAVING TRIMETALLIC NITRIDE ENDOHEDRAL METALLOFULLERENE FILMS



(57) Abstract: An exemplary optical limiter device has an optically transmissive substrate and a layer on a first surface of the substrate, the layer having a trimetallic nitride endohedral metallofullerenes. The layer can be a thin film of the trimetallic nitride endohedral metallofullerene, a layer material with a cavity containing a solution with the trimetallic nitride endohedral metallofullerene, a sol-gel with a trimetallic nitride endohedral metallofullerene, and a self assembled monolayer with a trimetallic nitride endohedral metallofullerene. The layers of trimetallic nitride endohedral metallofullerenes can be vapor deposited, solution deposited and/or self-assembled onto optical components. The third-order

nonlinear properties of these films provide desired transmission characteristics.